

# Commonwealth of Massachusetts Executive Office of Energy & Environmental Affairs

# Department of Environmental Protection

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Charles D. Baker Governor

Karyn E. Polito Lieutenant Governor Matthew A. Beaton Secretary

> Martin Suuberg Commissioner

June 27, 2017

Mr. David Bercume 169 South Spencer Road Spencer, MA 01562 **RE:** East Brookfield

Transmittal No.: X271567 Application No.: CE-16-022

Class: SM-50

FMF No.: X271567

AIR QUALITY PLAN APPROVAL

#### Dear Mr. Bercume:

The Massachusetts Department of Environmental Protection ("MassDEP"), Bureau of Air and Waste, has reviewed your Non-major Comprehensive Plan Application ("Application") listed above. This Application concerns the proposed construction and operation of an asphalt plant on your property located on Adams Street in East Brookfield, Massachusetts ("Facility"). The Application bears the seal and signature of Eric A. Pearson, Massachusetts Registered Professional Engineer Number 39741.

This Application was submitted in accordance with 310 CMR 7.02 Plan Approval and Emission Limitations as contained in 310 CMR 7.00 "Air Pollution Control" regulations adopted by MassDEP pursuant to the authority granted by Massachusetts General Laws, Chapter 111, Section 142 A-O, Chapter 21C, Section 4 and 6, and Chapter 21E, Section 6. MassDEP's review of your Application has been limited to air pollution control regulation compliance and does not relieve you of the obligation to comply with any other regulatory requirements.

MassDEP has determined that the Application is administratively and technically complete and that the Application is in conformance with the Air Pollution Control regulations and current air pollution control engineering practice, and hereby grants this **Plan Approval** for said Application, as submitted, subject to the conditions listed below.

Please review the entire Plan Approval, as it stipulates the conditions with which the Facility owner/operator ("Permittee") must comply in order for the Facility to be operated in compliance with this Plan Approval.

## 1. DESCRIPTION OF FACILITY AND APPLICATION

#### A. HISTORY AND DESCRIPTION OF OPERATIONS AND PROJECT DESCRIPTION

The property where the Facility will be built is currently undeveloped land. There are no existing MassDEP Air Quality Plan Approvals for the Facility. The Permittee proposes to construct a new 200 ton per hour hot mix asphalt ("HMA") production plant on this property. The Facility will generate point source air emissions from the rotary drum asphalt mixer, the liquid asphalt heater, the asphalt storage tanks, and the HMA storage silo. These emissions will include nitrogen oxides (NOx), sulfur dioxide (SO<sub>2</sub>), carbon monoxide (CO), volatile organic compounds (VOC), and particulate matter (PM), all of these primarily from combustion in the rotary drum mixer. Small quantities of hazardous air pollutants (HAP) will be emitted, primarily formaldehyde, also primarily as a product of combustion from the rotary drum mixer. Visible emissions or "blue smoke", which consist of condensed particulate hydrocarbons, will be emitted from filling the HMA storage silo and from loading HMA from the silo into trucks. The Facility will also generate fugitive dust emissions from the paved road surfaces and the raw material aggregate handling, and fugitive odor emissions from the loading of HMA into trucks. The Permittee limit the allowable operating hours of the Facility to between 6:00 AM and 6:00 PM Monday through Saturday, for 39 weeks a year, and thereby will limit the Facility-wide potential emissions.

Following is a description of the individual processes or pieces of equipment, organized as emission units (EUs).

#### 1. Drum mixer (Emission Unit (EU)1)

The drum mixer will be an ADM Model EX300 or equivalent counterflow rotary dryer/mixer. Aggregate will be dried and heated inside the rotary drum and then pass behind the burner nose. Behind the burner, the heated aggregate will be mixed with liquid asphalt and RAP to form the product hot mix asphalt ("HMA"). Exhaust from the rotary dryer will pass through a cyclone and baghouse to control particulate matter (PM) emissions.

#### 2. Hot oil heater (EU2)

The liquid asphalt tank and HMA storage silos require heating to maintain sufficient temperature. The heat will be supplied by circulating heat transfer oil. The heat transfer oil will be heated in a dedicated hot oil heater burning No. 2 fuel oil. This heater will be rated at 1,500,000 Btu per hour.

#### 3. HMA storage silo (EU3)

The HMA will flow onto enclosed conveyors leading to the top of the 300 ton HMA storage silos. The silo will be equipped with a top of silo blue smoke recovery system. ("Blue

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smoke" refers to the hydrocarbons, both visible as opacity and invisible, that emanate from heated asphalt products.) The exhaust vents of the silo will be ducted together with the conveyors to capture exhaust gases containing hydrocarbon vapors. The exhaust will be pulled by a fan into the rotary dryer burner for combustion. HMA will be loaded from the bottoms of the silo into trucks.

#### 4. Asphalt tanks (EU4)

Liquid asphalt will be stored in two (2) 25,000 gallon capacity tanks equipped with vent condensers to control condensable hydrocarbon emissions.

#### 5. Truck Loadout (EU5)

HMA will flow from the bottom of the EU3 HMA storage silo into asphalt product trucks.

6. Receipt, storage and conveying of mineral aggregate and RAP (EU6)

Raw material aggregate and recycled asphalt pavement ("RAP") will be trucked to the Facility and stored in three-sided, covered storage bins. These raw materials will be moved by front-end loader to covered conveyors leading to the drum mixer.

#### C. APPLICABLE REGULATORY REQUIREMENTS

#### 1. State Requirements

#### a) BACT

The new asphalt plant project is subject to the 310 CMR 7.02(8) requirements for Best Available Control Technology (BACT). The application proposed Top-Case BACT for this project. MassDEP is in agreement that Top-Case BACT, as reflected in the Facility emission limits in Table 2, is BACT for this project. The BACT emission limits will be achieved by using the following equipment and methods:

- 1. Particulate matter emissions from raw material/aggregate handling will be controlled Best Management Practices (BMP) which include using only pre-washed aggregate; using covered storage bins; keeping all driving surfaces free of dust by vacuum sweeping and water sprays.
- 2. Emissions of NOx, CO, VOC, and HAP from the rotary dryer will be controlled by a low- $NO_x$  burner and good combustion practices. Each of these air contaminants will meet its Top-Case BACT limit as specified in Table 2.  $SO_2$  emissions from the rotary dryer will be inherently low because only low sulfur oil (not to exceed 15 parts per million sulfur by weight) will be used as fuel.

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- 3. Particulate matter emissions from the rotary dryer will be controlled by a cyclone followed by a fabric filter baghouse, and will meet the Top-Case BACT limit of 0.01 grains per dry standard cubic foot (dscf).
- 4. Hydrocarbon/particulate matter emissions from the liquid asphalt tank will be controlled by vent condensers.
- 5. Blue smoke hydrocarbon/particulate matter emissions from the HMA will be captured by the top of silo blue smoke recovery system, and pulled down through the enclosed silo conveyor to be combusted inside the combustion chamber of the rotary drum mixer.

#### b) Air Dispersion Modeling

The Permittee conducted ambient air dispersion modeling for nitrogen dioxide (NO<sub>2</sub>), SO<sub>2</sub>, PM less than 10 microns in diameter (PM<sub>10</sub>), PM less than 2.5 microns in diameter (PM<sub>2.5</sub>), CO and for air toxics. The application contained the results from the modeling, which showed that the project would not exceed the National Ambient Air Quality Standards (NAAQS). MassDEP has reviewed the modeling and found that emissions at the proposed Facility will comply with the respective Ambient Air Quality Standards (AAQS), Threshold Exposure Levels (TELs), and Allowable Ambient Limits (AALs).

#### c) Sound Monitoring and Modeling Study

Operation of the proposed Facility will cause sound emissions that may cause noise. The Application described the following proposed sound-emitting equipment and associated sound suppression and sound transmission prevention features:

- -Fully enclosed burner on the rotary dryer,
- Silencer in the baghouse exhaust stack,
- Enclosures on the baghouse fan and air compressor,
- Enclosures for the mixer gear reducer and the conveyor chain drives, and
- 18 foot high wooden sound barrier walls on the east, west, and south sides of the site.

The Permittee conducted background sound level monitoring and established ambient sound levels at locations of interest based on these measurements and MassDEP guidance. The Permittee then calculated or modeled predicted sound impacts from measured ambient sound levels and project sound emissions. Table A summarizes the predicted sound levels at the following locations as described in the Application.

Table A					
Sound Modeling	Lowest Background	Predicted Maximum Sound	Total Predicted	Predicted Sound Level	
Locations	Sound Level (L <sub>90</sub> , dBA)	Level from Facility (dBA)	sound Level (dBA)	Change (dBA)	
ST-1	42.3	51.6	52.1	9.8	
ST-2	41.2	47.5	48.4	7.2	
ST-3	39.4	47.4	48.0	8.6	
ST-4	43.1	49.6	50.5	7.4	
ST-5	43.4	46.1	48.0	4.6	
ST-6	42.2	46.0	47.5	5.3	

Based on review of the engineering design of the Facility including sound mitigation measures and predicted facility sound level impacts, MassDEP has determined that the design incorporates sound suppression and sound transmission prevention elements that constitute necessary equipment, service and maintenance, and other necessary precautions to prevent unnecessary sound emissions, as required by 310 CMR 7.10.

After the approved Facility commences operation, the Permittee shall conduct a sound survey (Table 3, Condition 7). The sound survey shall be performed in accordance with a protocol reviewed and approved by MassDEP in accordance with Table 5, Condition 3.

#### 2. Federal Requirements

The Permittee has indicated that the project is subject to 40 CFR Subpart I for Asphalt Concrete Plants. MassDEP has accepted delegation for Subpart I. The Permittee will ensure compliance with Subpart I by ensuring that the Facility complies with the more stringent emission standards in Table 2 (0.01 vs. 0.04 grains PM/dscf, and 5% opacity vs. 20% opacity).

# 2. <u>EMISSION UNIT IDENTIFICATION</u>

Each Emission Unit ("EU") identified in Table 1 is subject to and regulated by this Plan Approval:

	Table 1					
EU	Description	Design Capacity	Pollution Control Device (PCD)			
1	Rotary Drum/Mixer Model ADM EX300 or equivalent	200 tons HMA per hour, 100 MMBtu per hour	Cyclone and Baghouse			
2	Asphalt storage tank heater	1.5 MMBtu per hour	None			
3	Storage Silo	300 tons HMA	Blue Smoke recovery at top of silo			
4	Liquid Asphalt Tanks	Two (2) 25,000 gallon capacity	Vent Condensers			
5	Truck Loadout	N/A	None			
6	Aggregate Receipt/Storage/Conveying	N/A	Water Spraying, Road Sweeping			

#### Table 1 Key:

EU = Emission Unit MMBtu = Million British Thermal Units PCD = Pollution Control Device HMA = Hot Mix Asphalt

# 3. <u>APPLICABLE REQUIREMENTS</u>

#### A. OPERATIONAL, PRODUCTION and EMISSION LIMITS

The Permittee is subject to, and shall not exceed the Operational, Production, and Emission Limits as contained in Table 2:

Table 2						
	Operational /	Air	Emissi	on Limit <sup>1,2</sup>	n Limit <sup>1,2</sup>	
EU	Production Limit	Contaminant	Short Term	TPM	TPY	
1	561,600 tons hot mix     asphalt per year	NO <sub>x</sub>	0.113 lb/MMBtu	4.0	15.9	
	2. 2,005,714 gallons No. 2 fuel oil per year	$SO_2$	0.00154 lb/MMBtu	0.06	0.22	
	3. 501,429 gallons No. 2 fuel oil per month	СО	0.39 lb/MMBtu	13.7	54.8	
	4. 2,808 operating hours per year	VOC	0.032 lb/ton hot mix asphalt	2.3	9.0	
		HAP (single)	0.62 lb/hr	0.22	0.87	
		HAP (total)	1.76 lb/hr	0.6	2.5	
		PM/PM <sub>10</sub> /PM <sub>2.5</sub> (filterable)	0.01 gr/dscf	0.9	3.6	
		PM (condensable)	0.0194 lb/ton hot mix asphalt	1.4	5.5	
1 & 2	5. 2,035,800 gallons No. 2	NO <sub>x</sub>	N/A	4.1	16.2	
combined total	fuel oil per year	$SO_2$	N/A	0.06	0.22	
เบเลา		CO	N/A	13.9	55.5	
Facility Wide	6.	Visible Emissions	No Visible Emissions	N/A	N/A	

#### Table 2 Key:

EU = Emission Unit CO = Carbon Monoxide

PM(filterable) = Total Particulate Matter as measured by EPA Method 5 filter or equivalent

 $PM_{2.5}$  = Particulate Matter less than or equal to 2.5 microns in diameter

VOC = Volatile Organic Compounds

HAP (total) = total Hazardous Air Pollutants. TPM = tons per month  $NO_x = Nitrogen Oxides$  $SO_2 = Sulfur Dioxide$ 

 $PM_{10}$  = Particulate Matter less than or equal to 10 microns in diameter

PM (condensable) = PM as measured by EPA Method 202 or equivalent

HAP (single) = maximum single Hazardous Air Pollutant

 $gr/dscf = grains per dry standard cubic foot \\ TPY = tons per consecutive 12-month period$ 

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Note 1: Compliance with the short term emission limits shall be determined by the arithmetic average of three (3) 1 hour or longer test runs.

Note 2: Actual monthly and yearly emissions shall be calculated using emission factors as detailed in the Application or as modified by results from stack testing.

#### B. <u>COMPLIANCE DEMONSTRATION</u>

The Permittee is subject to, and shall comply with, the monitoring, testing, record keeping, and reporting requirements as contained in Tables 3, 4, and 5:

	Table 3				
EU	Monitoring and Testing Requirements				
1	1. Within 150 days after initial startup of EU 1, and then once every five years thereafter, the Permittee shall conduct emissions compliance testing on EU1 to demonstrate compliance with the emission limits contained in Table 2 and the applicable limits contained in 40 CFR 60 Subpart I, "Standards of Performance for Hot Mix Asphalt Facilities". Testing shall be conducted in accordance with the requirements and procedures set forth by appropriate EPA Reference Test Methods, 40 CFR 60 Appendix A and Subpart I. All compliance testing shall be scheduled with MassDEP personnel at a mutually agreeable date and time.				
	<ol> <li>The Permittee shall conduct a "visolite" leak detection test on the baghouse prior to the start of each operating season, and on a monthly basis during the operating season. Additional tests shall be performed as needed to locate leaks, bag failures, or other problems with normal operation of the control device.</li> </ol>				
1	3. The Permittee shall install, operate and maintain an outlet gas temperature and differential pressure monitoring system for the cyclone and baghouse which includes a continuous reading of the temperature and differential pressure in the plant operator's control station. Additionally, the Permittee shall ensure that audible and visual alarms are present to signal the need for corrective action in the event the temperature or differential pressure are outside the limits of normal operation established by the manufacturer or through compliance testing.				
1	4. The Permittee shall monitor the exhaust stack of the baghouse on a daily basis to ensure that there are no visible emissions from the stack. If there are visible emissions, then the Permittee shall remove the rotary drum mixer from operation as quickly as practicable and repair the baghouse before returning the rotary drum mixer to service.				
1	5. The Permittee shall monitor the total asphalt production and total hours of operating time to ensure compliance with the operational and production limits specified in Table 2.				
1 and 2	6. The Permittee shall monitor total #2 fuel burning in these two emission units in order to demonstrate compliance with the Table 2 operating limits.				

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Table 3				
EU	Monitoring and Testing Requirements			
Facility- wide	7. The Permittee shall conduct a sound survey during daytime and nighttime operations in accordance with a MassDEP-approved protocol. The survey shall be conducted within 180 days of the commencement of continuous operation of the Facility.			
	The Permittee shall work in full cooperation with MassDEP if the sound survey results deviate from the predicted sound levels specified in this Plan Approval. The reason for the deviation shall be investigated and changes shall be implemented to remediate any excess sound being generated. MassDEP shall be notified in advance of any physical changes at the Facility to reduce sound, and of the times any sound measurements will be made to determine the effect of the changes made.			
Facility- wide	8. The Permittee shall monitor sulfur content of each new shipment of fuel oil received. Sulfur content of the fuel can be demonstrated through fuel analysis. The analysis of sulfur content of the fuel shall be in accordance with the applicable American Society for Testing Materials (ASTM) test methods or any other method approved by MassDEP and USEPA. Fuel sulfur information provided by fuel suppliers will satisfy this requirement.			
Facility- wide	9. The Permittee shall, at a minimum, conduct a daily inspection of all air pollution control equipment and related operations and activities, including but not limited to the cyclone, the baghouse, the top of the silo blue smoke recovery system, and the vent condensers for the liquid asphalt starage tanks In addition, the plant operator shall routinely observe the discharge stacks during operation of the subject equipment.			
	10. The Permittee shall routinely monitor the roadways and other paved surfaces for excessive dust emissions from vehicle traffic, and shall vacuum sweep and/or water the surfaces as warranted by conditions to remove excess dust from the paved surfaces.			
Facility- wide	11. The Permittee shall monitor all operations to ensure sufficient information is available to comply with 310 CMR 7.12 Source Registration.			
	12. If and when MassDEP requires it, the Permittee shall conduct additional emission testing in accordance with USEPA Reference Test Methods and Regulation 310 CMR 7.13.			

# Table 3 Key:

EU = Emission Unit

USEPA = United States Environmental Protection Agency

	Table 4				
EU	Record Keeping Requirements				
1	The Permittee shall keep records of the fuel usage, asphalt production volumes and operating hours on a monthly basis.				
	2. The Permittee shall keep records of the cyclone and baghouse outlet temperatures and pressure drops on a continuous basis.				
	3. The Permittee shall establish and use a maintenance, inspection and testing log to record and document maintenance, inspection and testing activities on the subject equipment and associated air pollution control equipment. These records shall include, at a minimum, all visolite testing performed, replacement of leaking filter cartridges or bags, daily equipment inspections, and stack test results.				
2	4. The Permittee shall keep records of the fuel usage and operating hours of the asphalt heater on a monthly basis.				
Facility- wide	5. The Permittee shall maintain oil analysis results used to demonstrate compliance with fuel oil sulfur content requirements.				
Facility- wide	6. The Permittee shall maintain adequate records on-site to demonstrate compliance status with all operational, production, and emission limits contained in Table 2 above. Records shall also include the actual emissions of air contaminant(s) emitted for each calendar month and for each consecutive twelve-month period (current month plus prior eleven months). These records shall be compiled no later than the 15 <sup>th</sup> day following each month. An electronic version of the MassDEP approved record keeping form, in Microsoft Excel format, can be downloaded at <a href="http://www.mass.gov/eea/agencies/massdep/air/approvals/limited-emissions-record-keeping-and-reporting.html#WorkbookforReportingOn-SiteRecordKeeping">http://www.mass.gov/eea/agencies/massdep/air/approvals/limited-emissions-record-keeping-and-reporting.html#WorkbookforReportingOn-SiteRecordKeeping</a> .				
	7. The Permittee shall maintain records of monitoring and testing as required by Table 3.				
	8. The Permittee shall maintain a copy of this Plan Approval, underlying Application and the most up-to-date SOMP for the EU(s) and PCDs approved herein on-site.				
	9. The Permittee shall maintain a record of routine maintenance activities performed on the approved EU(s), PCD(s) and monitoring equipment. The records shall include, at a minimum, the type or a description of the maintenance performed and the date and time the work was completed.				
	10. The Permittee shall maintain a record of all malfunctions affecting air contaminant emission rates on the approved EU(s) and PCDs and monitoring equipment. At a minimum, the records shall include: date and time the malfunction occurred; description of the malfunction; corrective actions taken; the date and time corrective actions were initiated and completed; and the date and time emission rates and monitoring equipment returned to compliant operation.				
	11. The Permittee shall maintain records to ensure sufficient information is available to comply with 310 CMR 7.12 Source Registration.				
	12. The Permittee shall maintain records required by this Plan Approval on-site for a minimum of five (5) years.				

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Table 4				
EU	EU Record Keeping Requirements			
	13. The Permittee shall make records required by this Plan Approval available to MassDEP and USEPA personnel upon request.			

## Table 4 Key:

EU = Emission Unit SOMP = Standard Operating and Maintenance Procedure PCD = Pollution Control Device USEPA = United States Environmental Protection Agency

Table 5				
EU	Reporting Requirements			
1	1. The Permittee shall submit a compliance emission test protocol to MassDEP's Central Regional Office for review and approval at least 30 days prior to the scheduled commencement of said testing.			
1	2. The Permittee shall submit an emission test report to MassDEP's Central Regional Office for review within 60 days of the completion of any required compliance stack testing.			
Facility- wide	3. The Permittee shall submit a sound survey protocol for the required initial compliance test to MassDEP's Central Regional Office for review and approval at least 30 days prior to the scheduled commencement of said survey.			
Facility- wide	4. The Permittee shall submit the sound survey results to MassDEP's Central Regional Office, in writing, attention BAW Permit Chief, within 45 days of completion of the sound survey.			
Facility- wide	5. The Permittee shall submit to MassDEP all information required by this Plan Approval over the signature of a "Responsible Official" as defined in 310 CMR 7.00 and shall include the Certification statement as provided in 310 CMR 7.01(2)(c).			
	6. The Permittee shall notify the Central Regional Office of MassDEP, BAW Permit Chief by telephone: 508-767-2845, email: <a href="mailto:CERO.Air@massmail.state.ma.us">CERO.Air@massmail.state.ma.us</a> and <a href="mailto:Roseanna.Stanley@state.ma.us">Roseanna.Stanley@state.ma.us</a> , or fax: 508-792-7621, as soon as possible, but no later than three (3) business day after discovery of an exceedance(s) of Table 2 requirements. A written report shall be submitted Permit Chief at MassDEP within ten (10) business days thereafter and shall include: identification of exceedance(s), duration of exceedance(s), reason for the exceedance(s), corrective actions taken, and action plan to prevent future exceedance(s).			
	7. The Permittee shall report every three years to MassDEP, in accordance with 310 CMR 7.12, all information as required by the Source Registration/Emission Statement Form.			

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Table 5 Key:

EU = Emission Unit

BAW = Bureau of Air and Waste

# 4. SPECIAL TERMS AND CONDITIONS

A. The Permittee is subject to, and shall comply with, the Special Terms and Conditions as contained in Table 6 below:

Table 6			
EU	Special Terms and Conditions		
1	1. The Permittee shall have readily accessible on-site as spares, at all times, the minimum number of filte elements, cartridges, or bags for the EU1 baghouse, as recommended by the manufacturer's specifications.	er	
3	2. The Permittee shall properly maintain the top of silo blue smoke recovery system and keep it in operation whenever HMA is being produced.		
4	3. The Permittee shall equip the liquid asphalt storage tanks with vent condensers to control visible emissions.		
5	4. The Permittee shall construct the Facility so that there will be enough room around the silo and truck approach area to install a suitable enclosure to capture the emissions from loading HMA into trucks; and leaving enough room for a possible control device and ancillary equipment (blower, instrumentation, etc.). The Permittee shall install such control device if MassDEP determines it is necessary to avoid a condition of air pollution from truck loading emissions.		
6	5. The Permittee shall ensure that the material transfer conveyors are covered to prevent wind-blown dus emissions.	it	
6	6. The Permittee shall use only pre-washed aggregate at the Facility.		
6	7. The Permittee shall store all solid raw materials in roofed and three-sided structures to control wind-blown dust emissions.		
Facility -wide	8. The Permittee shall employ Best Management Practices to control fugitive emissions, including but not limited to keeping all facility roads paved, swept and/or wetted as applicable. All facility roadways, aggregate handling areas, and areas around the storage structures shall be paved.		
Facility -wide	9. The Permittee shall limit the operating hours of the Facility to between 6:00 AM and 6:00 PM daily, Monday through Saturday, and shall ensure that equipment is not turned on before 6:00 AM on operating days.		
Facility -wide	10. During construction, the Permittee shall prevent excessive emissions of particulate matter by seeding, paving, covering, wetting, or otherwise controlling particulate matter.		

Table 6				
EU	Special Terms and Conditions			
	11. The Permittee shall utilize non-volatile release agents for the trucks, require that all trucks cover their loads with tarps free of rips and/or tears as quickly as possible after loading and limit on-site truck speeds to no more than 10 miles per hour.			
	12. The Permittee shall ensure that the subject Facility complies with all applicable requirements contained in 40 CFR 60, Subpart I, "Standards of Performance for Hot Mix Asphalt Plants".			
	13. The Permittee shall develop a SOMP for the Facility within 90 days of startup of the emission units. The Permittee shall operate the EUs consistent with the Final SOMP and the conditions/parameters established during the initial compliance test. The final SOMP shall include operating procedures for periods of startup and shut-down. The Permittee shall maintain the SOMP onsite.			
Facility -wide	<ul> <li>14. The Permittee shall construct and maintain, for the life of the Project, the following noise mitigation measures, as detailed in the submitted Noise Assessment Report for the Facility: <ul> <li>a. A fully enclosed burner on the rotary dryer</li> <li>b. A silencer in the baghouse exhaust stack</li> <li>c. Enclosures on the baghouse fan and air compressor</li> <li>c. Enclosures for the mixer gear reducer and the conveyor chain drives</li> <li>d. 18 foot high wooden sound barrier walls on the east, west, and south sides of the site.</li> </ul> </li> </ul>			
	15. Compliance with the conditions of this Plan Approval does not relieve the Permittee from the obligation to comply with 310 CMR 7.01 and 310 CMR 7.10 when operating the approved equipment or any other activities at the Facility.			

#### Table 6 Key:

EU = Emission Unit SOMP = Standard Operating and Maintenance Procedure HMA = Hot Mix Asphalt

- B. The Permittee shall install and use an exhaust stack, as required in Table 7, on each of the Emission Units that is consistent with good air pollution control engineering practice and that discharges so as to not cause or contribute to a condition of air pollution. Each exhaust stack shall be configured to discharge the gases vertically and shall not be equipped with any part or device that restricts the vertical exhaust flow of the emitted gases, including, but not limited to, rain protection devices known as "shanty caps" and "egg beaters."
- C. The Permittee shall install and utilize exhaust stacks with the following parameters, as contained in Table 7, for the Emission Units that are regulated by this Plan Approval:

Table 7					
EU Stack Height Above Ground (feet) Stack Inside Exit (Nominal) Stack Gas Exit Velocity (Nominal) Temperature (Nominal) (°F)					
1	45	4	80	300	

Table 7 Key:

EU = Emission Unit

°F = Degree Fahrenheit

### 5. **GENERAL CONDITIONS**

The Permittee is subject to, and shall comply with, the following general conditions:

- A. Pursuant to 310 CMR 7.01, 7.02, 7.09 and 7.10, should any nuisance condition(s), including but not limited to smoke, dust, odor or noise, occur as the result of the operation of the Facility, then the Permittee shall immediately take appropriate steps including shutdown, if necessary, to abate said nuisance condition(s).
- B. If asbestos remediation/removal will occur as a result of the approved construction, reconstruction, or alteration of this Facility, the Permittee shall ensure that all removal/remediation of asbestos shall be done in accordance with 310 CMR 7.15 in its entirety and 310 CMR 4.00.
- C. If construction or demolition of an industrial, commercial or institutional building will occur as a result of the approved construction, reconstruction, or alteration of this Facility, the Permittee shall ensure that said construction or demolition shall be done in accordance with 310 CMR 7.09(2) and 310 CMR 4.00.
- D. Pursuant to 310 CMR 7.01(2)(b) and 7.02(7)(b), the Permittee shall allow MassDEP and / or USEPA personnel access to the Facility, buildings, and all pertinent records for the purpose of making inspections and surveys, collecting samples, obtaining data, and reviewing records.
- E. This Plan Approval does not negate the responsibility of the Permittee to comply with any other applicable Federal, State, or local laws or regulations now or in the future.
- F. The Application is incorporated into this Plan Approval by reference. Should there be any differences between the Application and this Plan Approval, the Plan Approval shall govern.

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- G. Pursuant to 310 CMR 7.02(3)(k), MassDEP may revoke this Plan Approval if the construction work is not commenced within two years from the date of issuance of this Plan Approval, or if the construction work is suspended for one year or more.
- H. This Plan Approval may be suspended, modified, or revoked by MassDEP if MassDEP determines that any condition or part of this Plan Approval is being violated.
- I. This Plan Approval may be modified or amended when in the opinion of MassDEP such is necessary or appropriate to clarify the Plan Approval conditions or after consideration of a written request by the Permittee to amend the Plan Approval conditions.
- J. Pursuant to 310 CMR 7.01(3) and 7.02(3)(f), the Permittee shall comply with all conditions contained in this Plan Approval. Should there be any differences between provisions contained in the General Conditions and provisions contained elsewhere in the Plan Approval, the latter shall govern.

#### 6. MASSACHUSETTS ENVIRONMENTAL POLICY ACT

MassDEP has determined that the filing of an Environmental Notification Form (ENF) with the Secretary of Energy & Environmental Affairs, for air quality control purposes, was not required prior to this action by MassDEP. Notwithstanding this determination, the Massachusetts Environmental Policy Act (MEPA) and 301 CMR 11.00, Section 11.04, provide certain "Fail-Safe Provisions," which allow the Secretary to require the filing of an ENF and/or an Environmental Impact Report (EIR) at a later time.

# 7. <u>APPEAL PROCESS</u>

This Plan Approval is an action of MassDEP. If you are aggrieved by this action, you may request an adjudicatory hearing. A request for a hearing must be made in writing and postmarked within twenty-one (21) days of the date of issuance of this Plan Approval.

Under 310 CMR 1.01(6)(b), the request must state clearly and concisely the facts, which are the grounds for the request, and the relief sought. Additionally, the request must state why the Plan Approval is not consistent with applicable laws and regulations.

The hearing request along with a valid check payable to the Commonwealth of Massachusetts in the amount of one hundred dollars (\$100.00) and a completed <u>Adjudicatory Hearing Fee</u> <u>Transmittal Form</u>, a copy of which is attached hereto, must be mailed to:

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This request will be dismissed if the filing fee is not paid, unless the appellant is exempt or granted a waiver as described below. The filing fee is not required if the appellant is a city or town (or municipal agency), county, or district of the Commonwealth of Massachusetts, or a municipal housing authority.

MassDEP may waive the adjudicatory hearing filing fee for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file, together with the hearing request as provided above, an affidavit setting forth the facts believed to support the claim of undue financial hardship.

Enclosed is a stamped approved copy of the application submittal.

Should you have any questions concerning this Plan Approval, please contact Paul Dwiggins by telephone at 508-767-2760, or in writing at the letterhead address.

This final document copy is being provided to you electronically by the Department of Environmental Protection. A signed copy of this document is on file at the DEP office listed on the letterhead.

Roseanna E. Stanley Permit Chief Bureau of Air and Waste

#### Enclosures:

- Adjudicatory Hearing Fee Transmittal Form
- Stamped Plan Application

ecc: East Brookfield Board of Health East Brookfield Fire Department MassDEP/Boston - Yi Tian ESS Group—Eric Pearson